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FOLEY AND LARDNER LLP			WU, JIANYE	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/644,857

### Applicant(s)

SASHIHARA, TOSHIYUKI

### Examiner

Jianye Wu

### Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 8/21/03.  
2a) This action is **FINAL**.      2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-20 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 8/21/03 is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
    1. Certified copies of the priority documents have been received.  
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892) ✓  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO/SB/08)  
    Paper No(s)/Mail Date See Continuation Sheet.

4) Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_\_.  
5) Notice of Informal Patent Application  
6) Other: \_\_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :8/21/03,4/22/04, 11/14/06, 5/3/07.

**DETAILED ACTION*****Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 5** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 5** recites the limitation "the system" in line 1. There is insufficient antecedent basis for this limitation in the claim.

For purpose of continuation of the prosecution, "the system" is being interpreted as --a system--.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-6, 8-16, and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes, JR (US 20030065805 A1, hereinafter **Barnes**) in view of Olkkonen et al. (US 6842460 B1, hereinafter **Olkkonen**).

For **claim 1**, Barnes discloses a system for informing that the user is in or not in wireless LAN service area comprising at least:

a preset data storing means (160 of Fig. 1; or stored in memory, first line of [0110]) for storing identification data (125 of Fig. 1; or authentication data, [0110]) of a hot spot dealer (particular area, 2nd line of [0385]) to which the user is subscribed, and identification data of a hot spot dealer in roaming contract relation to the user's own subscribed hot spot dealer ([0110]);

a wireless communication means (101 of Fig.1; or anyone of wireless LAN, WLAN, wireless MAN, and wireless PAN in [0044]);

a display means (175 of Fig. 1; or high resolution color display or dynamic touch screen, [0037]) and

a means functioning (combination of 125 and 175 in Fig. 1):  
when providing a display as to whether the user is in the service area of a hot spot service, to obtain the electric field intensity (strength of the communication signal, [0032]) of a channel as a subject of survey and identification data of a dealer and check (validation, [0110]) whether the obtained identification data (authentication input, [0110]) is identical with identification data of the user's own subscribed hot spot dealer, which is stored in the preset data storing means (authentication process described in [0110]-[115]);

when the obtained identification data is identical with the identification data of the user's own subscribed hot spot dealer, to output data for display on the display means such that the user can decide that the obtained electric field intensity is that of the user's own subscribed hot spot dealer (authentication process described in (authentication process described in [0110]; or anyone of [0111]-[0115]); and

**Barnes is silent on** displaying the electric field intensity (signal strength, [0032]) is that of the roaming contract relation dealer on the display means.

Olkonen discloses displaying the signal strength on a wireless device (Fig. 2B).

Both Barnes and Olkonen teach in the same art: wireless system. Olkonen simply provides more detailed display information regarding wireless system for users to keep them better informed regarding wireless system status.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to display the electric field intensity (signal strength) to provide helpful information for users.

As to **claim 2**, Barnes and Olkonen in combination disclose the system according to claim 1, wherein the display means includes:

a light-emitting means (LED, [0037]; or LCD that is commonly used as laptop monitor); and

a control means (graphics card controlling LCD in a laptop) for causing the light-emitting means to emit informing light in different colors (color display, [0036]) in the case when the user is in the service area of the user's own

subscribed hot spot dealer and the case when the user is in the service area of the dealer in roaming contract relation to the own hot spot dealer.

For **claim 3**, Barnes and Olkkonen in combination disclose a system (Fig. 1) for informing that the user is in or not in a wireless LAN service area strength of the communication signal, [0032]), obtaining congestion degree in service area and outputting the obtained congestion degree (congestion, [0327]) to display means and display the status of the system to display means.

Barnes and Olkkonen are **silent on** displaying the traffic congestion occurring at data link level.

However, data link data is implicitly present in the system (105 of Fig. 1, the comm. module must have data link layer in order to communicate with other systems), and displaying traffic information on the display device is either the same or very similar in nature regardless of the traffic type.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to display data link traffic on the display device due to obvious industrial expedient.

As to **claim 4**, Barnes and Olkkonen in combination disclose the system according to claim 1 which further comprises a means for collecting data link layer level protocol data, obtaining the congestion degree in the service area and outputting the obtained congestion degree to the display means (for the same reason as explained in claim 3 above, in addition to claim 1).

For **claim 5**, Barnes and Olkkonen in combination disclose a system, wherein the display means includes:

a light-emitting means (LED, [0037]; or LCD that is commonly used as laptop monitor); and

a means functioning to control the display of the congestion degree by controlling the flickering period of the light-emitting means based on the congestion degree (control logic circuit for LCD in a laptop).

As to **claim 8**, Barnes and Olkkonen in combination disclose the system according to claim 1,

which further comprises an agent authentication means (125 of Fig. 1) set by the user's own subscribed hot spot dealer and a hot spot dealer in roaming contract relation to the own hot spot dealer; and

in which: at the user side terminal data concerning the authentication means of the user's own subscribed hot spot dealer and a hot spot dealer in roaming contract relation to the own hot spot dealer and data necessary for these authentications are preliminarily stored in the memory means (stored in memory, [0110]);

the agent authentication means carries out authentication by using the data preset by the user (authentication input, [0110]); and

when the agent authentication means has carried out authentication successfully, data indicative of that the pertinent service area is that of the successfully authenticated hot spot dealer is outputted to the display means for display (line 1-2, [0112]).

As to **claim 9**, Barnes and Olkkonen in combination disclose the system according to claim 1, which further comprises a means for deciding, when a

check is made as to whether the obtained identification data is identical with the identification data of the user's own subscribed hot spot dealer as stored in the preset data storing means, that the obtained identification data and the identification data stored in the preset data storing means are identical when the two data are not perfectly identical but partly identical (sufficient to identify the user, [0115]).

As to **claim 10**, it is a station system (such as a laptop equipped with IEEE 802.11b card running XP Windows system) claim of claims 1 to 9, therefore, is rejected for the same reason as explained in claims 1-9 above.

As to **claim 11**, it is equivalent to claims 1, therefore, is rejected for the same reason as explained in claims 1 above.

As to **claim 12**, it is equivalent to claims 2, therefore, is rejected for the same reason as explained in claims 2 above.

As to **claim 13**, it is equivalent to claims 3, therefore, is rejected for the same reason as explained in claims 3 above.

As to **claim 14**, it is equivalent to claims 4, therefore, is rejected for the same reason as explained in claims 4 above.

As to **claim 15**, it is equivalent to part of claims 6, therefore, is rejected for the same reason as explained in claims 6 above.

As to **claim 16**, it is equivalent to claims 6, therefore, is rejected for the same reason as explained in claims 6 above.

As to **claim 18**, it is equivalent to claims 8, therefore, is rejected for the same reason as explained in claims 8 above.

As to **claim 19**, Barnes and Olkkonen in combination disclose the system according to claim 1, wherein the wireless LAN service is public. However, the limitation that the wireless service is public is irrelevant to the rejection 1, therefore, claim 19 is rejected for the same reason as explained in claim 1 above.

As to **claim 20**, Barnes and Olkkonen in combination disclose the method according to claim 18, wherein the wireless LAN service is public. However, the limitation that the wireless service is public is irrelevant to the rejection 18, therefore, claim 20 is rejected for the same reason as explained in claim 18 above.

5. **Claims 7 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes in view of Jim Geier, "Overview of the IEEE 802.11 Standard", Dec 6, 2001, hereinafter **Geier**.

As to **claim 7**, Barnes discloses the system according to claim 1, but is **silent** on using wireless LAN ESS (extended service set) ID as identification data.

Geier teaches ESS (Subsection "Extended Service Set (ESS) Networks", page 12; particularly Fig. 3.7). Since Geier teaches wireless LAN standard, it is obvious expedient to combine Barnes and Geier together to use ESS ID as identification data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to display to use ESS ID as identification data due to obvious industrial expedient for the benefit of applying the technology to more sophisticated networks.

claim 17, it is equivalent to claims 7, therefore, is rejected for the same reason as explained in claims 7 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianye Wu whose telephone number is (571)270-1665. The examiner can normally be reached on Monday to Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571)272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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